

9/05/13

Goals: Identify and use properties of real numbers.

- Pass back Quizzes & Reflection Sheet
- Review Quiz & Fill out Reflection Sheet
- Section 1.4 - Properties of Real Numbers
- Homework p. 26-28 (8-26 evens, 32, 34, 38, 60)

Section 1.4 Properties of real numbers

The Commutative Property: ORDER DOES NOT MATTER

Addition

$$a + b = b + a$$

Multiplication

$$a \cdot b = b \cdot a$$

$$H \iff S$$

The Associative Property: GROUPING

Addition

$$(a + b) + c = a + (b + c)$$

Multiplication

$$(a \cdot b) \cdot c = a \cdot (b \cdot c)$$

The Identity Property:

Addition

$$\underline{a} + 0 = \underline{a}$$

Multiplication

$$\underline{a} \cdot 1 = \underline{a}$$

$$\frac{1}{2} + \frac{1}{4} =$$

$$\left(\frac{2}{2}\right) \frac{1}{2} + \frac{1}{4}$$

The Zero Product Property (ZPP):

$$0 \cdot *$$

$$a \cdot 0 = 0$$

$$\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$$

Multiplication Property of -1:

$$a \cdot -1 = -a$$

$$-a \cdot -1 = a$$

Section 1.4 Properties of real numbers

Mental Math

$$3.49$$

$$3.50 - 3 = 147$$

$$3.40 = 120$$

$$3.9 = \frac{27}{147}$$

Equivalent Expressions

$$(4+3b)+7$$

$$(3b+4)+7$$

$$3b+(4+7)$$

COMM +
ASSOC +

$$3b+11$$

Deductive Reasoning

USING REASONABLE LOGIC
AND PRIOR KNOWLEDGE +
FACTS TO FORM
CONCLUSIONS

HW
26-28
(8-26 EVENS,
32, 34, 38, 60)